

AMENDMENTS TO THE CLAIMS

Claims 1-24 remain pending in the application. Please amend claims 2-6 and 8-18.

Claims 21-24 have been added. No claims have been canceled. This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A transmitting device for transmitting data packets over a network, the transmitting device comprising:
 - a framing coordinator for creating a decreasing redundancy data packet having a increasing ratio of message symbols/redundant symbols over the length of the packet; and
 - a transmitter for transmitting the decreasing redundancy data packet over the network.
2. (Currently Amended) The system of claim 1 further comprising: at least one codeword within the decreasing redundancy data packet wherein the number of message symbols per codeword remains constant and the number of redundant symbols decreases over the length of the packet.
3. (Currently Amended) The system of claim 1 further comprising: at least one codeword within the decreasing redundancy data packet wherein the number of message symbols per codeword increases over the length of the packet and the number of redundant symbols per codeword remains constant.

4. (Currently Amended) The system of claim 1 further comprising: at least one codeword within the decreasing redundancy data packet wherein the number of message symbols per codeword increases and the number of redundant symbols per codeword decreases over the length of the packet.

5. (Currently Amended) A transceiver for transmitting and receiving data over a network, the transceiver comprising:

a slicer for determining a signal-to-noise ratio of received decreasing redundancy data packets as a function of received packet length;

a block error correction calculator coupled to the slicer for determining redundancy requirements for the transceiver according to the determined signal-to-noise ratio; and

a transmitter coupled to the block error correction calculator for transmitting a schedule request packet over the network, the schedule request packet including the decreasing redundancy requirements of the transceiver as determined by the block error correction calculator to inform a transmitting network device of the decreasing redundancy requirement of the transceiver.

6. (Currently Amended) A system for block error correction on data packets in digital communication over a network, the system comprising:

a broadcaster device coupled to a network for broadcasting decreasing redundancy data packets over the network according to a framing schedule;

a first endpoint device coupled to the network for receiving the decreasing redundancy data packets~~broadcast data~~, the first endpoint device having a first decreasing redundancy requirement;

a second endpoint device coupled to the network for receiving ~~broadcast data~~the decreasing redundancy data packets, the second endpoint device having a second decreasing redundancy requirement; and

the broadcaster being configured to determine the framing schedule based on the greater of the first and second decreasing redundancy requirement.

7. (Original) The system of claim 6 wherein the block error correction is performed utilizing Reed-Solomon coding.

8. (Currently Amended) The system of claim 6 wherein the broadcaster device comprises a schedule framing coordinator, said schedule framing coordinator determining a new framing schedule based on decreasing redundancy requirements of at least one of the endpoint devices.

9. (Currently Amended) The system of claim 6 wherein the endpoint device comprises a slicer and a block error correction calculator for sampling the data and determining a redundancy requirements for at least one of the endpoint devices.

10. (Currently Amended) A method for negotiating the degree of redundancy in data packets transmitted by a broadcasting device over a network to multiple endpoint devices comprising the steps of:

determining a first redundancy requirement for a first endpoint device, the first redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

determining a second redundancy requirement for a second endpoint device, the second redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

selecting a framing schedule based on the redundancy requirement having the greatest amount of redundancy; and

transmitting data packets over the network to the first and second endpoint devices according to the framing schedule.

11. (Currently Amended) The method of claim 10 wherein the ~~step of~~ determining a first and second redundancy requirement further comprises the ~~step of~~ calculating a signal-to-noise ratio in a slicer.

12. (Currently Amended) The method of claim 11 further comprising the ~~step of~~ calculating the redundancy requirement in a block error correction calculator based on the signal-to-noise ratio.

13. (Currently Amended) The method of claim 10 wherein the ~~step of~~ selecting further comprises the ~~step of~~ waiting for all endpoints devices in a network to respond with a framing schedule request.

14. (Currently Amended) The method of claim 10 wherein the ~~step of selecting further~~ comprises the ~~step of~~ checking for framing schedule requests periodically for higher redundancy requests.

15. (Currently Amended) The method of claim 10 wherein the ~~step of selecting further~~ comprises the ~~step of~~ utilizing the framing schedule of each higher redundancy framing schedule request as the schedule request is received by the broadcaster device.

16. (Currently Amended) The method of claim 10 wherein the ~~step of selecting further~~ comprises the ~~step of~~ sending the framing schedule to the endpoint devices.

17. (Currently Amended) The method of claim 10 wherein the ~~step of selecting further~~ comprises the ~~step of~~ waiting for a schedule acknowledge message sent by all endpoint devices in the network to the broadcaster device.

18. (Currently Amended) The method of claim 17 wherein the ~~step of selecting further~~ comprises the ~~step of~~ periodically resending the framing schedule to the endpoint devices when less than all endpoint devices in the network respond with the schedule acknowledge message.

19. (Original) A system for negotiating a framing schedule for block error correction on data packets in digital communications comprising:

means for receiving data packets at an endpoint device;

means for calculating an error correction redundancy requirement for the endpoint device;

means for transmitting the calculated redundancy requirement from the endpoint device over the network to a broadcaster device;

means for determining a framing schedule in the broadcaster device based on the error correction redundancy requirement of the endpoint device; and

means for transmitting a data packet having an increasing ratio of message signals/redundant symbols according to the framing schedule.

20. (Original) A method for negotiating the degree of redundancy in data packets transmitted by a broadcasting device over a network to multiple endpoint devices comprising:

means for determining a first redundancy requirement for a first endpoint device, the first redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

means for determining a second redundancy requirement for a second endpoint device, the second redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

means for selecting a framing schedule based on the redundancy requirement having the greatest amount of redundancy; and

means for transmitting data packets over the network to the first and second endpoint devices according to the framing schedule.

21. (New) A method for negotiating the degree of redundancy in data packets transmitted by a broadcasting device over a network to multiple endpoint devices comprising:

determining a first redundancy requirement for a first endpoint device, the first redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

determining a second redundancy requirement for a second endpoint device, the second redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

selecting a framing schedule based on the redundancy requirement having the greatest amount of redundancy after waiting for all endpoints devices in a network to respond with a framing schedule request; and

transmitting data packets over the network to the first and second endpoint devices according to the framing schedule.

22. (New) A method for negotiating the degree of redundancy in data packets transmitted by a broadcasting device over a network to multiple endpoint devices comprising:

determining a first redundancy requirement for a first endpoint device, the first redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

determining a second redundancy requirement for a second endpoint device, the second redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

selecting a framing schedule based on the redundancy requirement having the greatest amount of redundancy after waiting for a schedule acknowledge message sent by all endpoint devices in the network to the broadcaster device; and

transmitting data packets over the network to the first and second endpoint devices according to the framing schedule.

23. (New) A method for negotiating the degree of redundancy in data packets transmitted by a broadcasting device over a network to multiple endpoint devices comprising:

determining a first redundancy requirement for a first endpoint device, the first redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

determining a second redundancy requirement for a second endpoint device, the second redundancy requirement comprising an increasing ratio of message symbols/redundant symbols over the length of a packet;

selecting a framing schedule based on the redundancy requirement having the greatest amount of redundancy after waiting for a schedule acknowledge message sent by all endpoint devices in the network to the broadcaster device and periodically resending the framing schedule to the endpoint devices when less than all endpoint devices in the network respond with the schedule acknowledge message; and

transmitting data packets over the network to the first and second endpoint devices according to the framing schedule.

24. (New) A method, comprising:

determining the redundancy requirements of a plurality of end point devices, wherein the redundancy requirements include an increasing ratio of message symbols/redundant symbols; and

selecting at least one framing schedule based on one of the redundancy requirements having the greatest amount of redundancy after receiving framing schedule requests from the plurality of end point devices.